ON A NEW FLORIDIAN CALLIOSTOMA.

BY WILLIAM HEALEY DALL.

In March, 1903, the U.S. Fish Commission steamer Fish Hawk obtained some casts of the dredge in the straits of Florida. This material has recently been turned over to the National Museum, and proves to contain several items of interest. At Station 7511, in 45 fathoms, off Fowey Rocks, was dredged a species of Calliostoma which appears to be new; at Station 7516 fragments of Oniscidia dennisoni were obtained, with a specimen of Scala (Acrilla) retifera Dall, 28 mm. in length, and at Station 7511 a fine specimen of the rare Subula floridana Dall, described originally from the Blake dredgings. As it has been shown that the name Eutrochus Adams is preoccupied, I replace it by Leiotrochus Conrad, 1863, typified by L. distans Conrad, of which the type has turned up in the National Museum (see Trans. Wagner Inst., iii, pp. 399 and 402), and proves to be a mature specimen of the shell named Trochus conus by H. C. Lea in 1845. Astele Swainson, 1855, seems to be more closely related to Solariella, and is described as "with no columella," the inner lip being simple and arcuate. Conrad's diagnosis is incorrect, as the reader will see by referring to the above-mentioned data. His type is smooth, with, in the adult, a narrow, deep umbilicus and a distinct Calliostomoid pillar. Owing to Conrad's contradictory diagnosis of 1863, I hesitated, in 1892, to accept his name, but as things now stand it seems necessary to do it or to propose a new one. description of the species is as follows:

Calliostoma (Leiotrochus) marionæ n. sp.

Shell acutely conic, with the sides of the spire slightly concave, ten-whorled, brilliantly polished, color a rich brick-red, mottled near the periphery with whitish flammules; nucleus translucent white, tilted obliquely; sculpture, on the subsequent four or five whorls, of five (5) granular, spiral ridges, separated only by narrow incised lines, with a more conspicuous ridge just above the suture; subsequently the ridges become flattened, wider and more or less spirally striate on their tops, while the original five incised lines retain a darker color than the rest of the surface; the suture is not strongly marked, and runs just below the periphery of the preceding whorl; base slightly convex, with ten or eleven similar incised spiral lines

stronger toward the umbilicus, where the interspaces become feebly nodulous, the last one on the brink of the umbilicus more strongly so; umbilicus moderately large, funicular, its walls white, smooth, and slightly excavated just within the basal margin; pillar white, thin, arcuate, ending in a blunt projection separated by a small notch from the basal margin of the aperture, which, with the outer lip, is thin and sharp; throat pearly, without lirations or callus on the body. Alt. of shell 19.0, max. diam. 18.0; diam. of umbilicus 2.5, min. diam. of base 16.0 mm.

The periphery is subangulate, becoming rounded in the adult. The operculum is thin, horny, multi-spiral, with about 14 whorls. The animal is of a reddish color somewhat like the shell, the sides of the foot granular, the muzzle concentrically wrinkled, the tentacles long and slender, with no epicephalic veil between them; the eyes large and black, on short but distinct peduncles, behind and above the tentacles; epipodial lobes with papillose edges and two or three more elongate processes on each side, but none project from the opercular lobe; the foot is short and rather blunt behind. As contracted from immersion in alcohol, the tentacles and epipodial processes seem smooth, and show no such ciliation as is figured by Adams in Calliostoma, while the absence of the "veil" is noteworthy.

Altogether, though not very large, this is one of the most attractive East American species, both in form and coloration. Only one specimen has yet been obtained, No. 187233, U.S. Nat. Mus. register.

Note on Trivia acutidentata Gask.—A few years ago, among a few shells obtained by me in San Francisco on board a schooner direct from the Galapagos Islands, I found one beach-worn *Trivia* which puzzled me, as it differed widely from any species then known to me. Upon a recent careful reading of the original description of *Trivia acutidentata* Gask., I find that this specimen corresponds exactly to Gaskoin's description.

This species, thus far unfigured, was described (Proc. Z. S., 1835, p. 201) from a single worn specimen collected by Cuming in the Bay of Guayaquil, and which, after description, was broken into unrecognizable fragments. As the locality of my specimen is also substantially the same, it would seem that this long-lost species has at this

late day been again found.—FRED L. BUTTON.

FEEDING HABITS AND GROWTH OF VENUS MERCENARIA. By Jas. L. Kellogg (N. Y. State Museum, Bull. 71). A very interesting and instructive paper illustrated by four plates.—C. W. J.